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Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Accelerating Wireline Broadband Deployment By Removing Barriers to Infrastructure Investment, WC Docket 17-84*

Dear Ms. Dortch:

On October 17, Dr. Sanjay Udani, Vice President of Internet & Technology Policy, Ian Dillner, and I of Verizon met with Terri Natoli, Michele Berlove, Zach Ross, and John Visclosky of the Wireline Competition Bureau and Suzy Rosen Singleton, Eliot Greenwald, and Susan Bahr of the Consumer and Governmental Affairs Bureau. During the meeting, we discussed accessibility issues possibly implicated by the transition from copper facilities to fiber ones, as well as the Commission's proposals surrounding discontinuance and copper retirement processes.¹

Accessibility

In response to recent ex partes filed in this proceeding,² we explained that we are not aware of any systemic issue in Verizon's networks that would cause end-users difficulties in using TTY or other assistive technologies after migrating from copper facilities to fiber. As we have explained previously,³ Verizon customers who migrate from copper to fiber have the option to continue with same TDM-based (a.k.a. POTS) service over fiber or to switch to a VoIP service called Fios Digital Voice (FDV).

¹ See *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment, 32 FCC Rcd 3266 (2017) ("*Wireline Notice*").

² See Letter from Deaf/Hard of Hearing Technology RERC, Universal Interfaces and IT Access RERC, to Marlene Dortch, FCC, WC Docket No. 17-84 (Oct. 12, 2017); Letter from Kevin Colvell, Ultratec, Inc., to Marlene Dortch, FCC, WC Docket No. 17-84 (Oct. 13, 2017).

³ See, e.g., Verizon Reply Comments, WC Docket No. 17-84, at 21 (July 17, 2017) ("Verizon Reply Comments").

Verizon has been offering voice services over fiber since it launched Fios in 2005. Sanjay explained his work at that time to help design the network to carry voice, facsimile, TTY, alarms, and other services, and to do so seamlessly and transparently for customers who had previously been served over copper facilities. Sanjay noted that as part of our design and engineering, Verizon required vendors to confirm that their equipment would work with TTY and other assistive technologies. He also explained that we conducted testing to ensure that the services provided over the network would meet accessibility requirements.⁴ Sanjay explained that as part of the design of our network, fiber-based voice services are carried over separate bandwidth using managed dedicated circuits in order to provide quality of service assurance and avoid resource constraints. He further noted that we engineered our systems to dedicate resources for voice calls so as to preserve the connection quality over our network both when we designed the systems and when we began offering FDV in 2010. Sanjay also described how we use the industry standard uncompressed G.711 codec for transmitting TTY calls over both TDM-over-fiber and FDV.

We explained that Verizon has over 3.9 million residential FDV customers.⁵ Despite the large number of customers who receive services over fiber, we explained that we have not seen evidence of systemic issues with the use of analog devices like TTYs or captioned telephones over Verizon's fiber-based voice services. We formed this conclusion after reviewing data from Verizon's Center for Customers with Disabilities where representatives are trained to work through a variety of accessibility matters. We also reviewed past accessibility complaints from the Commission regarding the functionality of TTY or captioned telephone equipment. However, we noted that should a customer in the future experience difficulty with using a TTY device over our fiber facilities, it is our practice to work with customers through the Verizon Center for Customers with Disabilities or otherwise to help address the issue.

Discontinuance and Copper Retirement

During the meeting, we also encouraged the Commission to pursue efforts to streamline and simplify the discontinuance and copper retirement processes, consistent with our filed comments and prior ex partes in this proceeding.⁶ The Commission should help providers to continue to deploy broadband by minimizing barriers and reducing delays. As a preliminary matter, we and others have urged that the Commission allow new attachers to use a One-Touch Make-Ready process to deploy on utility poles in order to help speed broadband

⁴ See, e.g., 47 CFR 14.21(d)(4) ("TTY signal compatibility. Products, including those providing voice communication functionality, shall support use of all cross-manufacturer non-proprietary standard signals used by TTYs.").

⁵ Verizon, *Financial and Operating Information as of June 30, 2017*, at 16, <http://www.verizon.com/about/file/22831/download?token=GNb3A70T>.

⁶ See Verizon Comments, WC Docket No. 17-84 (June 15, 2017) ("Verizon Comments"); Verizon Reply Comments; Ex Parte Letter from Katharine Saunders, Verizon, to Marlene Dortch, FCC, WC Docket No. 17-84 (Aug. 24, 2017); Ex Parte Letter from Katharine Saunders, Verizon, to Marlene Dortch, FCC, WT Docket No. 17-79 and WC Docket No. 17-84 (Sept. 11, 2017).

deployment.⁷ Further, by streamlining the Section 214 discontinuance process for legacy services and further simplifying the copper retirement process, the Commission can encourage continued investment and deployment.⁸ As Verizon has noted previously, the networks of the future are “going to be built with a lot of fiber deep into the network and that network is going to be built for multiuse cases, not for a single use-case.”⁹ Verizon has already announced partnerships with the cities of Boston and of Sacramento to bring next-generation connectivity and smart technology to these areas.¹⁰

There are very real harms to maintaining barriers to efficient discontinuances or to slowing copper retirements. Corning has provided a study that concludes that removing delays in being able to retire copper and discontinue services, as well as delays in attaching new fiber to poles, can have a significant and meaningful consumer benefits. This makes sense, as even a relatively short delay – or a lack of predictability – can multiply as providers work to transform thousands or millions of lines. Similarly, delays in being able to discontinue antiquated services can cause significant costs. For example, based on Verizon’s experience, there may be services, such as low speed DS0s, which can be offered over fiber but only at very high cost. As we noted previously,¹¹ we have estimated that the necessary equipment to provide a single fiber based DS0 equivalent at a customer location can cost more than \$30,000. Providers who are unable to discontinue these services efficiently would be faced with the cost of maintaining them over fiber should they choose to retire copper, which could divert resources that could be used for newer services.

In order to remove these barriers, we continue to urge the Commission to find that a 214 discontinuance application is not required, or alternatively, to forbear from its requirements, if a comparable fiber, IP-based, or wireless service alternative is available. At a minimum, we asked the Commission to eliminate or forbear from the “adequate replacement” test because it would be very burdensome and would slow down the technology migration process. We also urged the Commission to reverse the “functional test” for defining a “service.”

⁷ See, e.g., Verizon Comments at 4-8; Google Fiber Inc. Comments, WC Docket No. 17-84, at 1-4 (June 15, 2017); Incompas Comments, WC Docket No. 17-84, at 5-10 (June 15, 2017).

⁸ See Comments of Corning Inc., WC Docket No. 17-84 (June 15, 2017); see also *id.*, at Attachment A, Hal Singer, Economists Incorporated, *Assessing the Impact of Removing Regulatory Barriers on Next Generation Wireless and Wireline Broadband Infrastructure Investment* (June 2017) (“Economists Inc. Analysis”).

⁹ See Thomson StreetEvents, *VZ - Q1 2017 Verizon Communications Inc. Earnings Call*, at 7 (April 20, 2017), <http://www.verizon.com/about/file/21877/download?token=HD2TwYhI>.

¹⁰ See Verizon News Release, *Mayor Walsh announces partnership with Verizon to transform city’s technology infrastructure* (Apr. 12, 2016), <http://www.verizon.com/about/news/mayor-walsh-announces-partnership-verizon-transform-citys-technology-infrastructure>; Verizon News Release, *Verizon announces partnership with the City of Sacramento for a smarter, safer, more connected city* (June 1, 2017), <http://www.verizon.com/about/news/verizon-announces-partnership-city-sacramento-smarter-safer-more-connected-city>.

¹¹ See Letter from Maggie McCready, Verizon, to Marlene Dortch, FCC, WC Docket No. 13-5 (June 12, 2017).

We also encouraged the Commission that even if it acts incrementally, it would be helpful to streamline several steps of discontinuance applications to allow grandfathering of products and the discontinuance of previously grandfathered products more efficiently. In particular, we urged the Commission to streamline discontinuance applications to allow expedited grandfathering of a service and faster discontinuance of previously grandfathered services by adopting a 10-day comment and 25-day auto-grant period for both of these types of applications. We also discussed streamlining the discontinuance processes where there are no customers. Consistent with the statutory standards in Section 10, the Commission could choose to forbear entirely from applying the 214 rules if a company has no customers, or could apply a shorter notice period where a company has had no customers for a period of time. For example, where a company has no customers for a period of 30 days, the Commission might require only a 10 or 15 day notice period.

We also continue to urge the Commission to streamline the copper retirement process, based on our experience under the current rules. As we've noted previously, additional flexibility in how and when we provide notice of copper retirement to customers would be helpful. The Commission should reduce the public notice period to 90 days when there are customers and 30 days when there are no customers, and tie any required customer notice to the date of a customer's migration, rather than to the date of actual copper retirement, and urged that providers have greater flexibility in the content and timing of the customer notifications. We also encourage the Commission to link the certification process to the customer migration rather than the Commission's public notice date. Finally, the Commission should repeal its existing prohibition against disclosing a contemplated copper retirement prior to filing a notice, because it keeps providers from efficiently working with customers and landlords to help coordinate deployment of fiber and migration to newer technologies.

Ultimately, the record supports changes in the rules that encourage companies to focus capital on fiber deployment rather than maintaining old TDM networks.¹² Quick action by the Commission on these issues can eliminate regulatory barriers that impede additional fiber deployment.

Please contact me if you need any further information.

Very truly yours,



cc: Terri Natoli, Michele Berlove, Zach Ross, John Visclosky, Suzy Rosen Singleton, Eliot Greenwald, Susan Bahr

¹² See Economists Inc. Analysis; Deloitte LLP, *Communications infrastructure upgrade: The need for deep fiber* at 5 (July 2017), <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-5GReady-the-need-for-deep-fiber-pov.pdf>.